

Parsing Data

Spoken Tutorial Project

<http://spoken-tutorial.org>

National Mission on Education through ICT

<http://sakshat.ac.in>

Script:Thirumalesh H S

Narrator:Priya K

IIT Bombay

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Learning Objectives



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- Split a string using a delimiter



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- ▶ Split a string using a **delimiter**
- ▶ Remove the leading, trailing and all whitespaces in a string



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- ▶ Split a string using a **delimiter**
- ▶ Remove the leading, trailing and all whitespaces in a string
- ▶ **Convert between different built-in datatypes**



System Specifications



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- ▶ **Ubuntu Linux 16.04 operating system**



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- ▶ **IPython 5.1.0**



Pre-requisite



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- ▶ You should know how to use **lists**



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- ▶ If not, see the relevant **Python tutorials** on <http://spoken-tutorial.org>



Parsing Data



Parsing Data

- Parsing the data is reading data in text form



Parsing Data

- ▶ Parsing the data is reading data in text form
- ▶ It is converted into a form which can be used for computations



split() function



split() function

- ▶ **split()** function breaks up a larger string into smaller strings using a defined separator



split() function

- ▶ **split()** function breaks up a larger string into smaller strings using a defined separator
- ▶ If no argument is specified, then whitespace is used as default separator

Syntax: `str.split(argument)`



split() function

- ▶ **split()** function parses a string and returns an array of tokens



split() function

- ▶ **split()** function parses a string and returns an array of tokens
- ▶ **This is called string tokenizing**



Exercise 1

Split `x` using `space` as argument.

Is it same as splitting without an argument?



split() function

- **Splitting the string without argument will split the string separated by any number of spaces**



split() function

- ▶ Splitting the string without argument will split the string separated by any number of spaces
- ▶ And giving space as argument will split the sentence specifically on single whitespace



strip() function



strip() function

strip() function removes all leading and trailing whitespaces in a string



Exercise 2

What happens if you type `int("1.25")` in the terminal?



Summary

- ▶ **Tokenize** a string
- ▶ **Split** a string separated by delimiters with **split()** function



Summary

- ▶ Remove whitespaces using the `strip()` function
- ▶ Convert datatypes of numbers from one type to another
- ▶ Parse input data and perform computations on it



Evaluation

1. How do you split the string
“**Guido;Rossum;Python**” to get
the words?



Evaluation

2. What does `int("20.0")` produce?

- ▶ 20
- ▶ 20.0
- ▶ Error
- ▶ "20"



Solutions

1. **line.split(',')**
2. **Error**



Forum to answer questions

- ▶ Do you have questions in **THIS Spoken Tutorial?**
- ▶ Choose the minute and second where you have the question.
- ▶ Explain your question briefly.
- ▶ Someone from the **FOSSEE** team will answer them. Please visit

<http://forums.spoken-tutorial.org/>



Forum to answer questions

- ▶ Questions not related to the Spoken Tutorial?
- ▶ Do you have general / technical questions on the Software?
- ▶ Please visit the FOSSEE Forum
<http://forums.fossee.in/>
- ▶ Choose the Software and post your question.



Textbook Companion Project

- ▶ The FOSSEE team coordinates coding of solved examples of popular books
- ▶ We give honorarium and certificate to those who do this

For more details, please visit this site:

<http://tbc-python.fossee.in/>



Acknowledgements

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- ▶ **It is supported by the National Mission on Education through ICT, MHRD, Government of India**
- ▶ **More information on this Mission is available at:**

<http://spoken-tutorial.org/NMEICT-Intro>



THANK YOU!

For more Information, visit our website
<http://fossee.in/>

